

(No Model.)

D. D. MAYFIELD.  
GATE.

No. 444,158.

Patented Jan. 6, 1891.

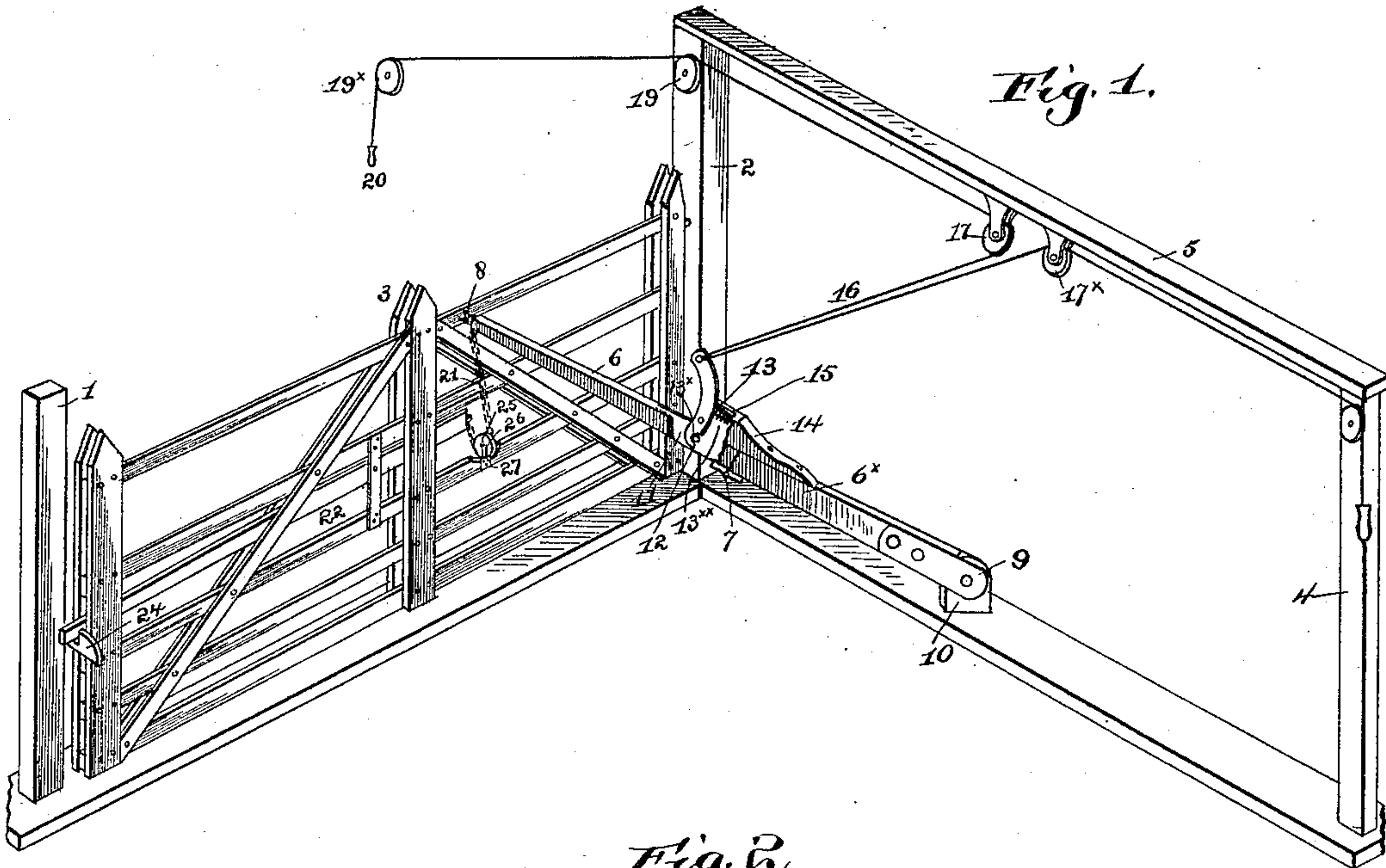


Fig. 1.

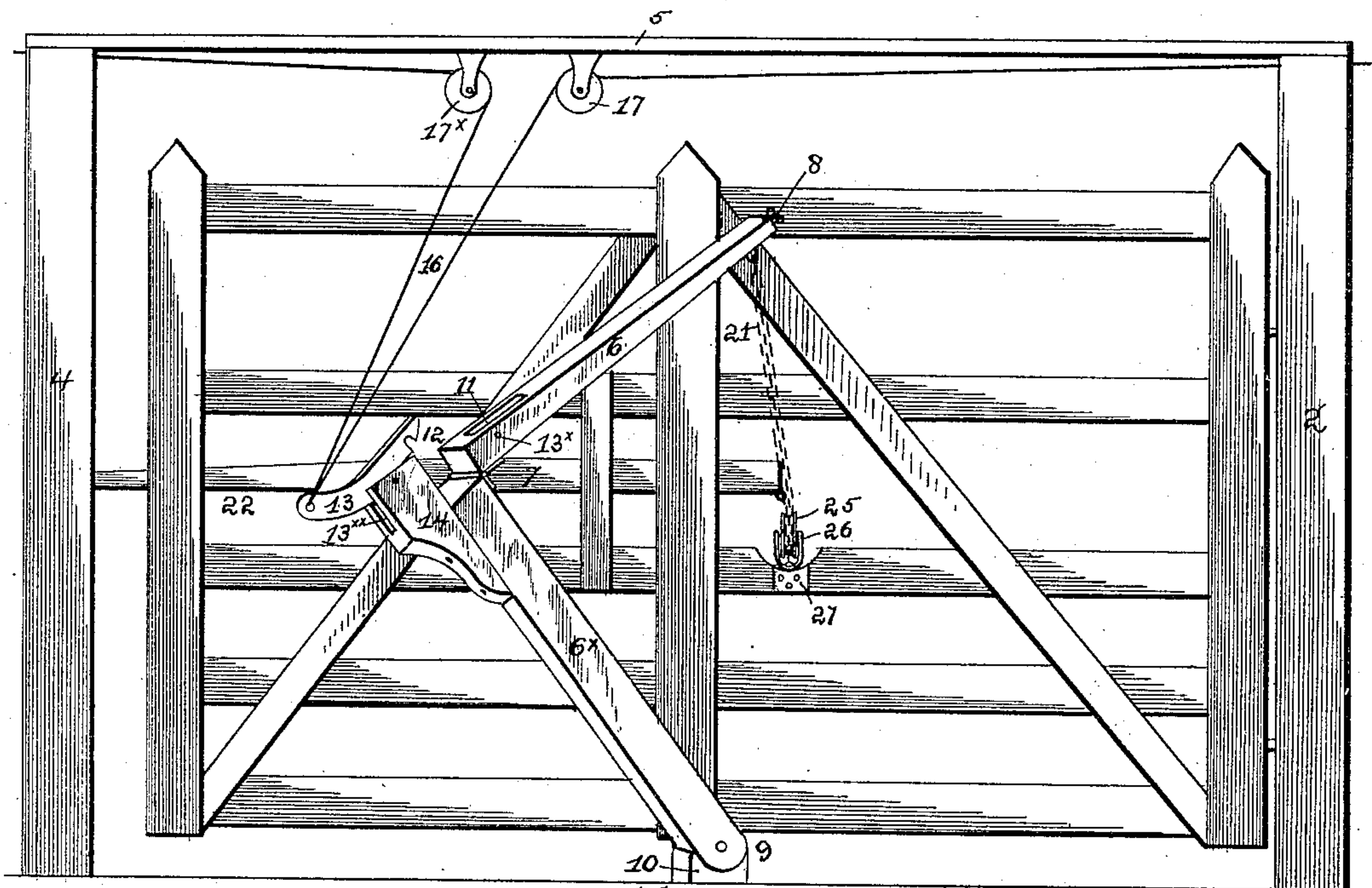
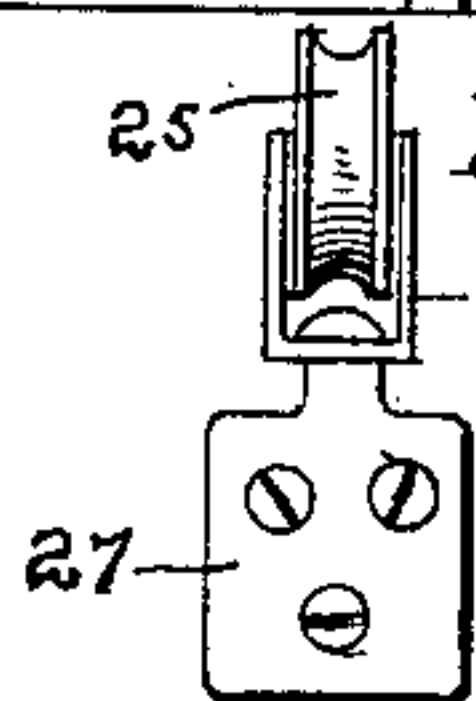


Fig. 2.



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# UNITED STATES PATENT OFFICE.

DANIEL D. MAYFIELD, OF SULLIVAN, INDIANA.

## GATE.

SPECIFICATION forming part of Letters Patent No. 444,158, dated January 6, 1891.

Application filed October 18, 1890. Serial No. 368,574. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL D. MAYFIELD, a citizen of the United States of America, residing at Sullivan, in the county of Sullivan and State of Indiana, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had thereto to the accompanying drawings.

My invention relates to improvements in gates; and the leading object of my invention is the provision of a gate which may be readily opened and closed by a person upon horseback or in a vehicle with ease and facility.

A further object of my invention is the provision of a gate of the character mentioned which will be of very simple and durable construction, which will be thoroughly efficient in operation, and which can be produced at a small cost, thus rendering the gate practical and useful.

To attain the desired objects the invention consists of a gate constructed substantially as herein illustrated, described, and specifically defined by the claims.

Figure 1 represents a perspective view of a gate constructed in accordance with and embodying my invention, the parts being in the position they assume when the gate is closed, and a part of the structure being broken away to disclose details. Fig. 2 represents an elevation of my gate, the parts being in the position they assume when the gate is open. Fig. 3 represents a detail.

Referring by numerals to the drawings, the numeral 1 designates one of the gate-posts, and the numeral 2 designates the other gate-post, set at a suitable distance apart, and to the gate-post 2 is hinged or swung the gate 3. The gate in this instance consists of a series of parallel horizontal rails, end and middle posts, and inclined brace-rails, as shown; but other constructions of gates may be employed, if desired.

At a suitable distance from the gate-post 2 is set the road-post 4, and the road and gate posts are connected by a rail or bar 5, the purpose of which will appear.

The drop-bar consists of the sections or parts 6 and 6<sup>x</sup>, which are hinged together at 7, the inner end of the section 6 being connected at 8 to the gate and the lower end of section 6<sup>x</sup> being pivoted or hinged at 9 to the

short post or upright 10. The section 6 is provided on its upper face with a recess or socket 11, in which is located the bar or pin 12, adapted to be engaged by the latch 13, pivoted in the bifurcated inner end of a piece or block 14, secured to the section 6<sup>x</sup> for locking the sections.

The latch 13 is of peculiar construction, and is provided with a lug 13<sup>x</sup>, adapted to enter a socket 13<sup>xx</sup> in the piece or block 14, and around the lug 13<sup>x</sup> is placed a coiled spring 15 for causing the latch to engage with the pin 12 and retaining it normally in engagement therewith.

To the outer end of the latch 13 is connected the operating cord or chain 16, which passes over the pulleys 17 and 17<sup>x</sup>, for opening and closing the gate from one side, and the cord or chain 18, which passes over the pulleys 19 and 19<sup>x</sup>, for opening and closing the gate from the other side, and to keep the cords taut at all times and prevent them from becoming tangled I attach staples or handles 20 to their free ends.

To or near the inner end of the section 6 of the drop-bar I attach one end of a short chain or cord 21, the other end of which is connected to the inner end of the latch 22, pivoted to a bar 23, secured to the gate and having its outer end adapted to engage with the keeper 24, and the chain or cord 21 passes over a pulley 25, journaled in a hanger or bracket 26, secured to a plate 27 on the gate, as clearly shown, the bracket being swiveled in the plate to allow the pulley to accommodate itself to the movement of the chain.

As I have now fully described the construction and arrangement of the parts of my improved gate, I will give a brief description of the manner of operating it.

The gate is in its normal or closed position, as shown in Fig. 1, and if it is desired to open the same one of the operating cords or chains is drawn upon. This acts upon the latch carried by the drop-bar, unlocks the sections of said bar, which in its normal position has both its sections in line, and at the same operation acts on the gate-latch and releases the same from the keeper, and then causes the sections of the drop-bar to approach each other, thus effecting the opening of the gate, the weight of the bar acting as a counter-balance



thereto. When it is desired to close the gate, the other cord is drawn upon, causing the sections of the bar to return to their normal position and closing the gate. It will be  
 5 seen that when either of the cords is drawn it breaks the joint of the bar and partially folds the sections, and when the other cord is drawn upon the sections of the bar are re-  
 10 turned to their normal position, thus effecting the opening and closing of the gate, and it will also be seen that the dead-center of the gate is passed without difficulty by the weight and momentum of the parts. The gate-latch is pivoted near its inner end, so that it will  
 15 ride easily upon the keeper when the gate is closed and engage the same; but when the chain connected to the inner end thereof is drawn upward by the raising of the inner section of the drop-bar the latch will be re-  
 20 leased.

My improved gate possesses many advantages over gates heretofore used, which will be readily understood and appreciated by all skilled in such matters.

25 I dispense entirely with springs to assist in opening the gate, and the construction is so very simple that it is almost impossible for the gate to get out of order.

The gate cannot be opened by stock run-  
 30 ning against it or striking against the drop-bar, as said bar is always firmly locked.

The simplicity, durability, cheapness, and efficiency of my gate are calculated to commend it as thoroughly practical and useful.

35 I claim as my invention—

1. The combination, with a gate, of a two-part flexibly-connected drop-bar connected to the gate, a lock for securing the two sections, and cords or chains for releasing the lock,  
 40 breaking the joint of the sections, and effecting the opening and closing of the gate.

2. The combination of a gate, a two-part drop-bar having the inner section or part connected to the gate, the outer part pivoted to a  
 45 suitable support, a latch for normally locking the sections, and cords or chains connected

to the latch for releasing the same and operating the drop-bar to open and close the gate.

3. The combination of a gate, a two-part flexibly-connected drop-bar having one end 50 connected to the gate and the other end connected to a suitable support, a latch pivoted on the gate, a chain connected to the inner end of the latch and the inner end of one section of the drop-bar, a swiveled guide-pulley 55 secured to the gate for guiding the chain, and operating cords or chains connected to the drop-bar and operating to open and close the gate.

4. In a gate, the combination of the gate 60 proper, the latch pivoted to the gate, the keeper for the latch, the chain connected to the inner end of the latch, the guide-pulley for said chain, the sectional drop-bar having its inner end connected to the gate and its 65 outer end pivoted to a suitable support, said chain being also connected to the inner section of said bar, the latch for locking the sections of the drop-bar, and the cords or chains connected to said latch for releasing the latch 70 and operating the bar to open and close the gate.

5. In a gate, the combination of the gate proper, the sectional drop-bar connected at its inner end to the gate and having its outer end 75 suitably secured, the pin or keeper carried by the inner section of the drop-bar, the bifurcated piece or block carried by the outer section, the latch pivoted in the bifurcated end of the block and having the lug adapted 80 to enter a socket in the block, the spring coiled around said lug, and the cords connected to the latch for releasing the same and operating the drop-bar to open and close the gate. 85

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL D. MAYFIELD.

Witnesses:

JAMES L. ALLISON,  
 JAMES W. HINKLE.